

REMARKS

The examiner rejects claims 1, 2, 4-19 and 21 under 35 USC §103(a) over van Ooijen, Gonthier et al. or Kotani et al. This rejection is, again, respectfully traversed.

Van Ooijen (EP-A-0 590 856) disclose a method of storing and using acetic or propionic acid releasably bound on a support. The composition contains an alkali(ne earth) metal acetate or propionate and an aliphatic carboxylic acid. The alkali(ne earth) metal acetate or propionate and the aliphatic carboxylic acid in the composition may be combined together in various ways. For instance, if the aliphatic carboxylic acid is a solid, this can be intimately mixed with the calcium propionate and form a solid mixture. However, if the aliphatic carboxylic is a liquid, this liquid can be used to impregnate the solid carboxylic acid. Although the composition disclosed by van Ooijen has a low concentration of the active ingredient (40-60% w/w carboxylic acid) it still has a highly pungent odor (as applicants know from their experiments). The inventive impregnated salts have a *much higher* concentration of the carboxylic acid (68-75 % by weight, see p.3:11-19) *with no or only a slight odor* (p.3:11-12). Nothing is mentioned in van Ooijen which would lead the skilled worker to the claimed invention - i.e., high concentrations of the active ingredient with no or only a slight odor.

Applicants are uncertain as to the argument of the examiner that gallic acid (3,4,5-trihydroxybenzoic acid) is within the claims, and as to what this means concerning the present invention. It is within the present claims for sure, though not within the claims or disclosure of EP-A-0 608 975.

Kotani et al. (US 4, 122,187) teaches a sorbic acid composition having improved

quality (col. 1:1-2). To produce this composition, sorbic acid is blended with a specific amount of glycerin (col. 1:55-57). The blending of the sorbic acids with glycerin is conducted by mixing them in a usual manner, and it is suitable to mix them as uniformly as possible (col. 2:25-27). This clearly shows that the composition is not uniform which is absolutely different to our inventive composition which is uniform because we have impregnated salts. In our process the liquid acids are soaked into the carboxylic acid salts which leads to a uniform composition. Nothing is mentioned in Kotani et al. about impregnating carboxylic acid salts with one or more carboxylic acids and the claimed process. In addition, nothing disclosed in Kotani et al. would lead the skilled worker to the present invention.

Gonthier et al. discloses a method of preserving fish and thereby inhibiting their degradation (col.1:20-21). The invention of Gonthier et al. is the synergistic effect of the biocidal properties of the two constituents (organic acid and their salts, see col.1:46-51). This is no relationship to the present invention. Nothing in Gonthier et al. would lead the skilled worker to our invention.

As we all know there are thousands of different preserving compositions around in the state of the art, but there is no state of the art which discloses the inventive composition.

Taking into account the disclosure of the aforementioned references alone or in combination would not guide a person skilled in the art to our invention nor would the disclosure of the references motivate the skilled worker to combine them.

BROECKEL et al., Ser. No. 09/487,000

Neither van Ooijen et al., Kotani et al., nor Gonthier et al. disclose or remotely suggest the inventive composition and the used process, and therefore there is no reason why the skilled person would or should combine the teachings of these references.

There is no prima facie case of obviousness for the following reason:

For a prima facie case, three requirements must be met according to the case law. First, the prior art relied upon, coupled with the knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled person to modify a reference or to combine references. See *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and *In re Skinner*, 2 USPQ2d 1788, 1790 (BPAI 1986). As mentioned above, there is no such motivation.

Second, the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled person at the time the invention was made. See *Amgen, Inc. v. Chugai Pharm. Co.*, 927 F.2d 1200, 1209, 18 USPQ2d 1016, 1023 (Fed. Cir. 1991) and *In re Erlich*, 3 USPQ2d 1011, 1016 (BPAI 1986). Again, there is no expectation of success in view of the abovementioned references.

Third, the prior art reference or combination of references must teach or suggest all limitations of the claims. See *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CcPA 1970). And the teachings or suggestions, as well as the expectation of success, must come from the prior art, not applicants' disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991). We would like to mention again there are no

BROECKEL et al., Ser. No. 09/487,000

such teachings, suggestions or expectations of success.

Applicants request that the rejection under 35 USC §103(a) be withdrawn.

In view of the foregoing remarks, applicants consider that the rejections of record have been obviated and respectfully solicit passage of the application to issue.

Please charge any shortage in fees due in connection with the filing of this paper, including Extension of Time fees to Deposit Account No. 11-0345. Please credit any excess fees to such deposit account.

Respectfully submitted,  
KEIL & WEINKAUF

A handwritten signature in black ink, appearing to read 'David C. Liechty', with a long horizontal flourish extending to the right.

David C. Liechty  
Reg. No. 48,692

1350 Connecticut Ave., N.W.  
Washington, D.C. 20036  
(202) 659-0100

DCL/lc



COPY OF PAPERS  
ORIGINALLY FILED

**COPY OF ALL CLAIMS**

1. Impregnated salts comprising at least one salt of one or more carboxylic acids, selected from the group consisting of formic acid, acetic acid, propionic acid, amino acids, oxo acids and mineral acids, which salt has been impregnated with from 0.5 to 30% by weight, based on the carboxylic acid salt, of at least one carboxylic acid that is liquid or becomes liquid at a temperature of 40°C or below, also selected from the group consisting of formic acid, acetic acid, propionic acid, amino acids, hydroxy carboxylic acids, oxo acids and mineral acids.
2. Impregnated salts as claimed in claim 1, comprising at least one salt of a carboxylic acid selected from the group consisting of formic acid, acetic acid and propionic acid, which salt has been impregnated with at least one carboxylic acid, also selected from the group consisting of formic acid, acetic acid and propionic acid.
4. Impregnated salts as claimed in claim 1, where the carboxylic acids in the carboxylic acid salts and the carboxylic acid used for impregnating the salts are identical.
5. Impregnated salts as claimed in claim 1, wherein the impregnated salts comprise at least one salt selected from the group of ammonium, potassium, sodium, lithium, magnesium or calcium salts.

6. A preservative comprising an impregnated salt as claimed in claim 1.
7. A preservative as claimed in claim 6, additionally comprising a carrier.
8. A preservative as claimed in claim 6, which is coated with a protective agent which is soluble or swellable in water at 20°C.
9. A preservative as claimed in claim 6, wherein water-soluble polymers, organic acids, their salts or low-melting inorganic salts are used as protective agents.
10. A preservative as claimed in claim 6, further comprising a protective agent selected from the group consisting of polyethylene glycols, polyvinylpyrrolidones or C<sub>3</sub>-C<sub>14</sub> organic acids and their salts, and amino acids and their salts.
11. A preservative as claimed in claim 6, wherein a dusting powder is applied to the surface in addition to or in place of the protective agent.
12. A process for producing impregnated salts as claimed in claim 1, which comprises impregnating at least one salt of a carboxylic acid or of a mixture of carboxylic acids selected from the group consisting of formic acid, acetic acid, propionic acid, amino acids, oxo acids and mineral acids, with at least one carboxylic

acid that is liquid or becomes liquid at a temperature of 40 °C or below and is also selected from the group consisting of formic acid, acetic acid, propionic acid, amino acids, hydroxy carboxylic acids, oxo acids and mineral acids, until the concentration is 30% by weight based on the carboxylic acid salt.

13. A process as claimed in claim 12, wherein at least one carboxylic acid is introduced into a mixer, and at least one salt of a carboxylic acid or of a mixture of carboxylic acids is metered in.

14. A process for producing a preservative, which comprises mixing impregnated salts as claimed in claim 1 with one or more carriers and/or formulation auxiliaries, and agglomerating with or without the addition of at least one binder.

15. A process as claimed in claim 14, wherein the preservative is coated with a protective agent which is soluble or swellable in water at 20°C and/or if required the flow characteristics of the preservative are ensured by dusting with a finely dispersed dusting powder.

16. A process for preserving human and animal food, wherein the impregnated salts as claimed in claim 1, or the preservatives are added to the human or animal food.

17. A preservative as claimed in claim 6, additionally comprising formulation auxiliaries.

18. A preservative as claimed in claim 10, wherein the protective agent is selected from the group consisting of C<sub>3</sub>-C<sub>6</sub> organic acids and their salts.

19. A preservative as claimed in claim 18, wherein the protective agent is selected from the group consisting of citric acid, fumaric acid, succinic acid, adipic acid, benzoic acid and their salts.

21. A process for acid treatment wherein the impregnated salts of claim 1 or the preservatives are introduced into or placed on an item to be treated.